14804

STATUS OF REMEDIAL ACTION ON JEFFERSON COUNTY LANDS EAST OF INDIANA STREET NOVEMBER, 1987 TO NOVEMBER, 1988

This report summarizes the actions that have occurred on the remedial action lands east of Indiana Street adjacent to the Rocky Flats Plant. These lands are owned by Jefferson County. The last update presented to Jefferson County was in November of 1987.

Subsequent to the plowing activity in the area immediately to the west of Mower Reservoir in Section 18, sampling indicated that the plutonium levels in the soil remained above the standard of 0.9 picocuries per gram of soil. The area was plowed a second time and sampled again. The results were not yet available for the November 1987 update document. The sample results were 0.04 $\pm$ 0.13 pCi/g and 0.00 $\pm$ 0.13 pCi/g for duplicate analysis. This indicates that plowing the second time was successful in reducing the plutonium concentrations below the standard, and revegetation activities could begin.

SOUTH AREA ACTIVITIES (WEST OF MOWER RESERVOIR, SECTION 18)

FALL, 1987

In order to reduce competition from weed species, primarily cheat grass, the plowed strips were disced in early November to kill the weeds. This was in anticipation of a spring seeding of native grasses. Removing the weedy species would give the planted native grasses a better chance of successful growth in the spring. To reduce or eliminate any wind or water erosion from the surface, 1) the surface was left in a roughened state; 2) winter wheat was planted at approximately 20 pounds of seed per acre; and 3) a native grass hay mulch was placed onto the surface at a rate of 2 tons per acre and crimped into the soil with a disc with crimper blades. This was all completed in early December.

WINTER, 1987-1988

Inspections were conducted during the winter months to detect any erosion early and perform any necessary erosion control work. The inspections revealed that little if any erosion was occurring and the snow downwind of the area was clean, even after heating of the soil had exposed the mulched area.

SPRING, 1988

Seeding of the area was begun toward the end of April, and

completed April 25. The native grass seed was planted through the existing cover of weeds without disturbing the surface to any great extent. A significant amount of natural vegetation not killed by the plowing is recovering. This will greatly increase the diversity of the revegetated surface.

SUMMER, FALL, 1988

The summer and fall months at the project site were extremely dry. Normal thunderstorm activity contributed very little precipitation. The seeds have not sprouted, for the most part. A site visit with Mr. Gary Finstad of the U.S. Soil Conservation Service on October 17th, 1988 revealed that most of the seed is lying dormant in the soil. A winter of precipitation should produce a good crop of native grass in the spring. Erosion protection is being provided by the winter wheat that did germinate and a continuous cover of annual and perennial weeds.

NORTH AREA (SOUTH OF GREAT WESTERN RESERVOIR, SECTION 7)

FALL, 1987

The plowed strips in the north area were sprayed with Roundup herbicide during the first two weeks in November. This was to reduce the competition caused by weeds, primarily cheat grass, with the native grasses. The control was very successful. Roundup was used because it is a safe, easily used herbicide with a very short residence time in the soil. Erosion protection for the winter months was provided by the tough, fairly tall stalks of the sorghum cover that had been planted previously.

WINTER, 1987-1988

Periodic inspections during the winter were conducted to find and correct any erosion problems that might be occurring. Erosion was not a problem, although prairie dogs continue to increase in numbers and threaten to compromise revegetation efforts in some areas.

SPRING, 1988

Seeding ~~was~~ started during the first part of April and was completed on the 15th. The seeding was done through the remaining standing dead vegetation which had weathered sufficiently during the winter so as not to hinder the seeding equipment.

SUMMER, FALL, 1988

As discussed above for the south area, the summer was very dry and very little of the seed germinated over the summer. It is lying dormant and more success will be seen in the spring of 1989. Erosion protection is being provided by annual and perennial weeds, rock, and the remaining sorghum skeletons.

FUTURE PLANS FOR NORTH AND SOUTH AREAS

Monitoring for both erosion control and vegetation success are planned for the winter of 1988-1989, and spring/summer 1989. Pending the outcome of the spring germination and summer growth of grasses, the next possible time to begin plowing the intermediate strips in the areas will be fall of 1989, although it might be advisable to wait until spring of 1990.

Other activities that will be started will be some experimental work with hydromulching and hydroseeding for the exceptionally rocky areas. Prior to any startup of these activities, Jefferson County will be notified, and asked for approval of any plans for these practices.

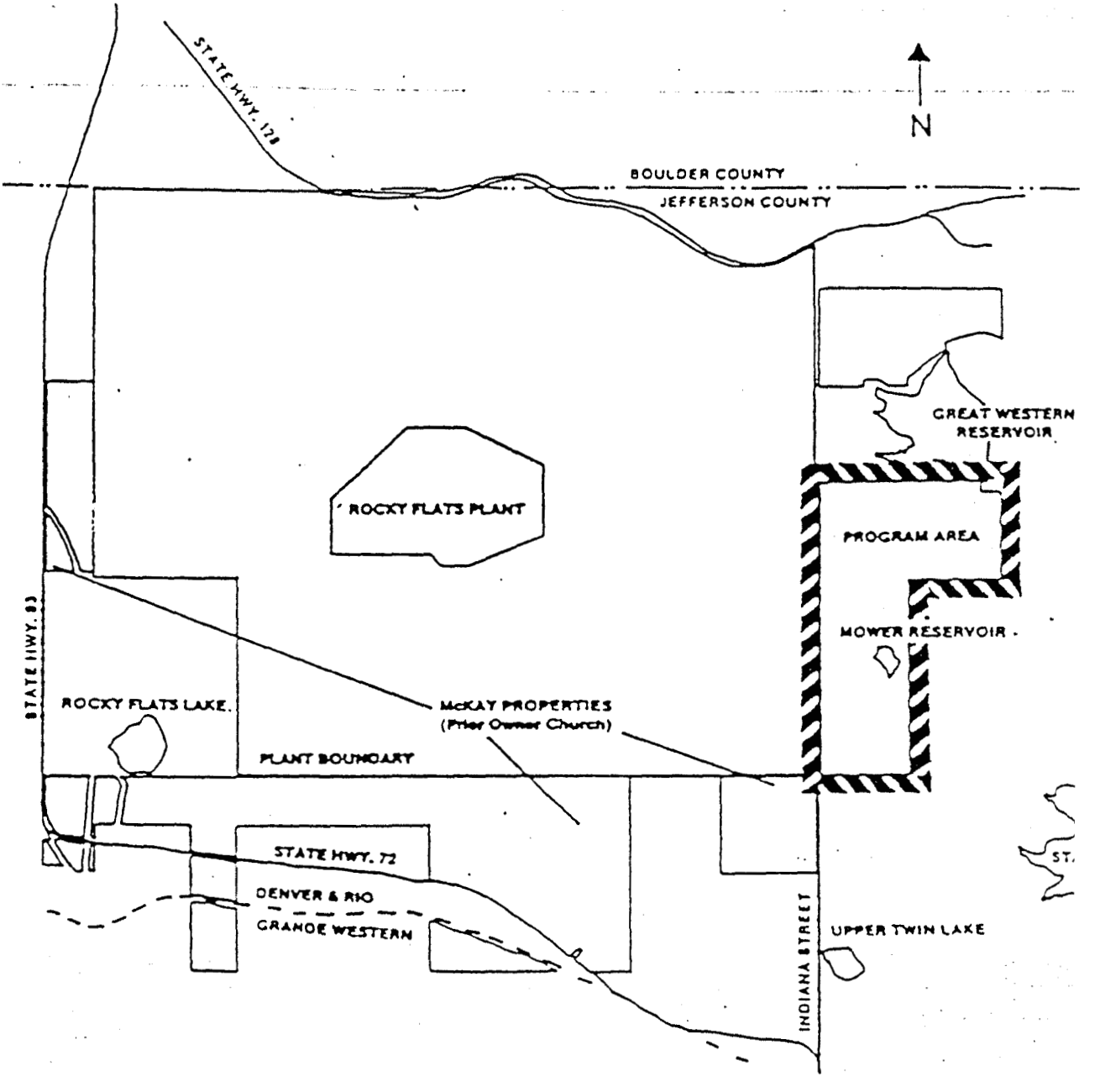

FIGURE 1. INDEX MAP SHOWING LOCATION OF PROGRAM AREA